

Dendrochronology Study Proposal

The dendrochronology study of the building will consist of a site visit by William Flynt to obtain samples followed by sample preparation (mounting, sanding, species confirmation, ring counts), microscopic measuring, data analysis, and a written report, all conducted in Deerfield.

In undertaking a dendrochronology study of any timber frame structure, a number of parameters need to be met in order for the study to have a decent chance of success. <u>It should be noted, however, that even if all the criteria are met, there is always a possibility that the results will be inconclusive.</u>

The following parameters must be taken into consideration;

- 1. Ideally, 10-15 samples need to be obtained from <u>each distinct period of construction</u> that is being investigated. This is not always possible due to lack of suitable samples.
- 2. Timber species must be Oak, Pitch pine, Hemlock, or possibly Chestnut and White pine as these species are the only ones for which there currently exist regional dated master chronologies/ site chronologies.
- 3. Waney, or bark edge, timbers of sufficient numbers must be accessible for coring.
- 4. Timbers must have a minimum of 55-60 growth rings to be useful.
- 5. While not mandatory, it is best if the study has access to any current research pertaining to the structure/site. Floor/framing plans are also recommended and need to be made available for the study for plotting sample locations.

Fees

The cost of the complete study is based on obtaining 10-15 samples per building phase of interest, with a minimum fee set at \$750, should less than 8 samples be taken. In addition travel reimbursement will be figured in as a separate item based on .50/mile. If no suitable samples can be obtained, costs will be limited to a prorated daily rate of \$350, plus mileage.

10-15 samples per building phase @ \$100/sample-----\$1000-1500 Mileage Varies depending on location

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